### FY01 ANNUAL ACCOMPLISHMENTS/ FY02 WORK PLAN

San Francisco Bay Network Inventory and Monitoring Program

# I. Overview and Objectives

The San Francisco Bay Network includes eight parks with significant natural resources in the coastal northern California area:

Eugene O'Neill National Historic Site EUON

Fort Point National Historic Site FOPO (admin.by GOGA)

Golden Gate National Seashore GOGA
John Muir National Historic Site JOMU

Muir Woods MUWO (admin.by GOGA)

Pinnacles National Monument PINN
Point Reyes National Seashore PORE

Presidio PRES (GOGA/private

partnership)

In FY01 the Servicewide I&M Program provided funding to the network for conducting inventories according to the priorities in the Study Plan to Inventory Biotic Resources of the San Francisco Bay Area National Parks. Inventories for vascular plants, rare plants, small mammals, herps, bats, birds, and coastal riparian species were conducted. The network received start-up funds from the Servicewide I&M Program for initiating the vital signs monitoring program. A network coordinator was hired and a vital signs workshop was held for one park (PINN).

In FY02, the network will complete several of the inventories and add support to several mapping efforts that will assist vital signs indicator selection. The network will complete vital signs workshops for two parks (EUON, JOMU). The 1997 workshop proceedings for three parks (GOGA, PINN, PORE) will be reviewed, indicators selected, and priorities established. This will be followed by a network vital signs workshop and priority-setting exercise looking at a broader, more regional scale and focus. The park Monitoring Plans and the network of technical specialists that assisted in the park processes will guide the vital signs scoping workshop for the network.

Network parks have identified the following objectives for inventory and monitoring:

- 1. Hire personnel to coordinate the I&M program for the network,
- 2. Present a compilation and synthesis of existing and historical data in standard, consistent GIS and database products,
- 3. Complete biological field inventories ensuring that 90% of species likely to exist in the parks are documented and vouchered,
- 4. Inventory taxa of special interest developing spatial distribution maps and estimates of abundance or condition,
- 5. Assist existing monitoring and accelerate mapping to support vital signs indicator selection and monitoring design, and

6. Complete vital signs scoping workshops and monitoring plans for all parks in the network and expand the scope to a regional scale for the network monitoring plan.

## II. Accomplishments and Scheduled Activities for FY02

#### A. Inventories

Objective 2. Present a compilation and synthesis of existing and historical data in standard, consistent GIS and database products. The top priority of the network is to hire a data manager.

- Task 1. Input and assess existing data into NPSpecies, NPBib, and the Dataset Catalog. In FY01, a PORE Bio-tech was paid to provide this service to the network. In FY02, a network Data Manager will be hired to coordinate this effort and ensure that national standards are met. A network Bio-tech for EUON and JOMU, and term park Data Managers for GOGA, PINN, and PORE will continue this effort for existing and newly acquired data from inventories.
- Task 2. Search for voucher specimens collected in the parks, biological studies, and additional inventory data. In FY02, the network Bio-tech will assist all parks and network Data Manager with this effort.
- Task 3. Develop the database formats appropriate for synthesis and data sharing. In FY02, a network data manager and three park data managers will be hired and will work on this together.
- Objective 3. Complete biological field inventories ensuring that 90% of species likely to exist in the parks are documented and vouchered.
  - Task 4. Contract an inventory of vascular plants for EUON and JOMU. The field surveys were initiated in FY01 and are 15% complete. The inventory of the new lands in PINN is scheduled to be contracted in FY02.
  - Task 5. Contract an inventory for small mammals and herps for EUON and JOMU. The field surveys were initiated in FY01 and are 75% complete and will be completed in FY02. GOGA utilized a cost share opportunity with the state of California Fish and Game Department and USGS Biological Resources Division to undertake their inventory in FY00.
  - Task 6. Conduct an inventory of aquatic species in the riparian areas in PINN (herpetofauna, invertebrates and fish). This work was initiated in FY01. It is 50% complete and will be completed in FY02.

- Task 7. Contract inventories of bats in all park units in the network. The surveys were initiated in late FY01 and will be continued in FY02.
- Task 8. Contract an inventory of coastal intertidal species for PORE and GOGA. The surveys were initiated in late FY01 and will be continued in FY02.
- Task 9. Verify and update the bird species list for PINN, EUON and JOMU. This work for PINN was contracted in late FY01. The network will use the same contractor for the other two parks. Field surveys will continue through FY02.
- Task 10. Contract an inventory of Ashy Storm petrels for GOGA and PORE. The inventory is 80% complete and will be finished in FY02.

Objective 4. Inventory taxa of special interest developing spatial distribution maps and estimates of abundance or condition.

Task 11. Conduct an inventory of rare plants for PORE, GOGA and FOPO. The work was initiated in FY01 and is 75% complete for PORE and the northern lands of GOGA. In FY02, surveys will continue. The network will consider funding a portion of the inventory for GOGA's newly acquired southern lands that were not included in the Inventory Study Plan.

## B. Vital Signs Monitoring

Objective 1. Hire personnel to coordinate the I&M program for the network. The network I&M Coordinator was hired in late FY01. The Coordinator will manage the network budgets, work closely with the Steering Committee (park technical specialists) and the Board of Directors (Superintendents), will assist with or write proposals, contracts and monitoring plans, and will facilitate I&M programs for the network parks where necessary in FY02.

- Objective 5. Assist existing monitoring and accelerate mapping to support vital signs indicator selection and monitoring design.
  - Task 12. Continue existing monitoring of potential or selected indicator species. Monitoring of riparian species, pinnipeds and aquatic species will be considered in FY02.
  - Task 13. Continue to monitor E/T wildlife species in GOGA, PINN and PORE. This was supported in FY01 and biological technicians will be obtained to continue this monitoring in FY02.
  - Task 14. Map the vegetation in PINN and new lands of GOGA. The PINN scoping workshop identified this task as a high priority needed to select vital signs

- monitoring. The network will search for partners to funds these projects and attempt to accelerate these tasks to FY02 or FY03.
- Task 15. Map the soils of PINN. The PINN scoping workshop identified this task as a high priority need also. The network will search for partners to fund this project and attempt to accelerate this task to FY03.
- Task 16. Map wetlands in GOGA.
- Task 17. Research the multi-species array surveys based on a matrix sampling scheme. Two researchers have utilized different methods for inventories at PORE and GOGA. Since all parks in the network may use this type of survey for vital signs monitoring, it will be evaluated and tested beginning in FY02.
- Task 18. Develop a network-wide protocol for monitoring selected bird species. Protocol development for riparian birds is being considered for FY02. Protocols will be developed for other bird groups in FY03.
- Task 19. Develop a network-wide protocol for monitoring rare plants. This is being considered for FY02.
- Task 20. Develop a network-wide protocol for monitoring pinnipeds. This is also being considered for FY02.
- Task 21. Initiate development of water quality monitoring plans for all parks in the network in FY02.
- Objective 6. Complete vital signs scoping workshops and monitoring plans for all parks in the network.
  - Task 22. Complete the workshop summary and monitoring concept model for PINN. The scoping workshop was held in September 2001. The summary and model will be sent to a wider peer-review before indicators and priorities are selected. From that, the monitoring plan will be developed. Implementation of the plan should begin in FY03.
  - Task 23. The scoping workshop for EUON will be held this winter. The same process as at PINN will be used to develop the indicators and monitoring plan. Implementation of the plan should begin in FY03.
  - Task 24. The scoping workshop for JOMU will also be held this winter following the PINN process. Implementation will also begin in FY03.
  - Task 25. Finalize a monitoring plan for GOGA and PORE. Use a small working group to evaluate the 1997 GOGA/ PORE Inventory Study Plan workshop for the

concept model and vital signs indicators. Implementation of the plans can begin as early as the later part of FY02.

Task 26. Complete the vital signs scoping process for the network with a regional network of partners. Scheduled to begin for late spring/early summer of FY02.